TESmart

User Manual

2x1 USB-C KVM Switch

CKS201 Master 23

To Enjoy Smart

CKS201 Master 23

English

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Preface

It's our great honor that you have chosen the KVM Switch produced by our company, Tesla Elec Technology Co.,Ltd. In this user manual, you will learn how to operate and use this product. Please read this user manual comprehensively before use. If you have any questions, comments or suggestions, please contact us via the following email:
support@tesmart.com.

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Product Information

For more information about TESmart products and how they can help you to enjoy your job, please visit the following TESmart website or contact an TESmart Authorized Reseller.

www.tesmart.com

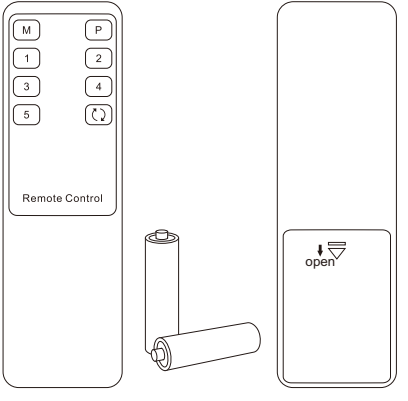
Contents

1. Safety Tips and Warnings

Tips: Please read the safety tips and warnings for USB-C KVM Switch comprehensively before use. Use this produce in accordance with its instructions, safety tips and warnings to prevent unnecessary damage to the product and potential dangers to users.

- Keep the product away from water.
- Clean the product with dry cloth.
- Use the product in accordance with its instructions and do not block its vents.
- Keep the product away from ignition sources, such as heat sinks, heat accumulators, stovepipes and other heat production settings (including audio amplifiers).
- Do not touch the product and the power cord with wet hands so as to lower the risk of electric shock and damage to the product. Do not let the product get wet or become damp.
- Unplug the power supply of this product in thunderstorm days or when it has been not used for a long time.
- Do not expose this product and its battery to open fire or overheating environment. Dispose the waste battery in accordance with instructions.
- Users shall not remove and repair the product without authorization.

2. Battery Description



Tips: By default, the remote control is not equipped with batteries, due to the safety requirements of some express companies. Install AAA dry cells before use.

Caution: Improper disposal of the lithium battery may cause an explosion. Do not throw the battery into fire. Keep the battery away from children. Dispose the waste battery in accordance with local regulations.

3. Warranty Information

We warrant this product as free of defects in material and workmanship for a period of one (1) year from the date of shipment. If during the period of warranty this product proves defective under normal use, we will repair or replace this product, provided that this product has not been subjected to mechanical, electrical, or other abuse or modifications. If it fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for six (6) months from the day of reshipment to the buyer.

4. Preface

Dear Users,

KVM Switch can greatly facilitate your management of audio-video devices. 2×1 USB-C KVM Switch can easily integrate cross-platform computer devices. Thus, you can easily control 2 computer devices with only 1 HDMI display.

This switch supports the use of USB hubs and USB keyboard and mouse. support USB 3.2 Gen 1 with superspeed data transfer rate. USB-A and USB-C charge port on the front panel, support BC 1.2 protocol to charge devices like mobile phones and tablets. This product also supports several other switching modes. You can switch input ports with front panel buttons, IR signals, keyboard hot keys and mouse wheel. Support wired network connection, 2 PCs connected to KVM can access to the network with only one network cable. At the same time, with EDID emulators in each input port, it can keep PCs always having correct display information.

Tips: If you need to control more computers or conduct more complex and professional switching, you can also choose other products of our company. For more details, please visit our official website: www.tesmart.com.

5. Features

- Using 1 monitors, 1 set of keyboard and mouse to control 2 computers
- Support resolution up to 8K(4320p)@60Hz and is backward compatible with 4K(2160p)@60Hz/120Hz/144Hz
- DP 1.4 compliant, and also support DisplayPort Alternate Mode (DP Alt Mode) which enables the USB connection to carry DisplayPort signals
- Support Unix/Windows/ Debian/ Ubuntu/Fedora/ MacOS X/ Raspbian/ Ubuntu for Raspberry Pi and other Linux based systems
- Support wired network connection, 2 PCs connected to KVM can access to the network with only one network cable
- With EDID emulators in each input port, it can keep PCs always having correct display information
- Support USB 3.2 Gen 1 with super-speed data transfer rate
- Support IR signals, front panel button, mouse wheel and keyboard hot keys to control the KVM to switch input ports
- Keyboard and mouse support passthrough mode and legacy emulation mode, significantly improving compatibility for keyboards and mice
- Support charging the USB-C devices connected to each input ports
- Support connecting mobile device to the front panel USB port to charge

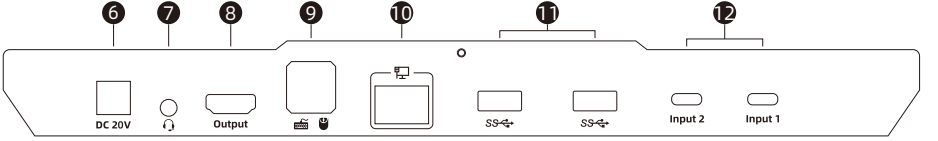
6. Packing List

- 1 * 2x1 USB-C KVM Switch
- 2 * USB-C Cables
- 1 * IR Remote Control
- 1 * DC 20V Power Adapter
- 1 * User Manual

Tips: After receipt of the product, please check the packing list carefully to make sure that no components have been lost and no damage to the product has been caused during transportation. If you have any problem, please contact us at any time.

7. Panel Description

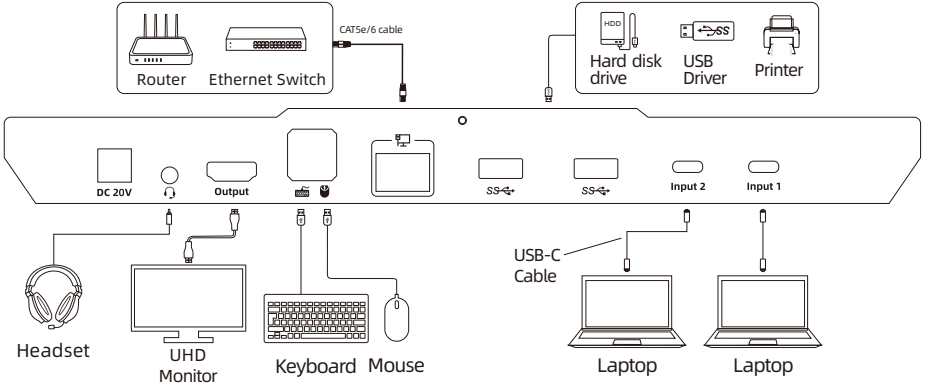
ID	Name	Function	ID	Name	Function
1	Data transfer and charging port	Can be used to transfer data and charge your mobile devices.	2	IR receiver	Receive IR remote signal.
3	Input selection button	Select input sources separately.	4	Input selection status indicators	The corresponding LEDs will be lit to indicate the current selected PC.
5	Power switch	Turn on or turn off power supply.			



ID	Name	Function
6	DC 20V	20V DC power supply.
7	3.5 mm Audio/mic	Integrated microphone and L/R audio output.
8	HDMI output	Connect to HDMI display for video output.
9	Keyboard and mouse input	For USB keyboard and mouse input.
10	LAN port	Insert the network cable into this port to let the 2 input PCs to connect to the local network area
11	USB 3.2 Gen 1 ports	Connect to USB 3.0 devices.
12	USB-C input device port	Connect USB-C devices for signal input and charging.

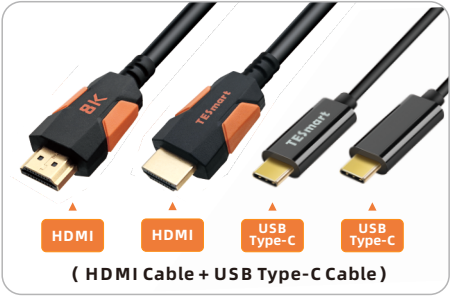
8. Connection Description

8.1 Connection Diagram



8.2 Connection Preparation

- Take into consideration all devices required to be connected and prepare a workbench large enough before the connection.
- Lay out the cables properly to facilitate the layout of power supply as a lot of power sockets and plug boards will be adopted in connection.
- Prepare different sticker labels to mark cables as a lot of cables will be adopted in connection.

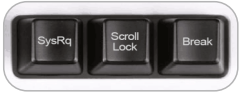


(HDMI Cable + USB Type-C Cable)

8.3 Connection Steps

1. Connect PC1 and PC2 with two USB-C cable.

2. Connect external mouse and keyboard to KVM's keyboard and mouse input port.



Tips: For the normal service of hotkeys, we recommend you use the full-key external keyboard with a separate **[Scroll Lock]** key (as shown above).

3. Connect USB 3.0 devices to KVM's standard USB 3.0 ports.

4. Connect KVM's HDMI output port to one HDMI display with one HDMI cable.

5. Connect external audio device to KVM's L/R out port.

6. Use the network cable to connect the LAN port on the KVM Switch to a router or local area network switch.

7. Connect the power cable to KVM's DC 20V port and plug it to a power socket.

8. By now, the connection has been completed. Turn on the power supply and the KVM Switch will begin to work.

Tips: 1. Please refer to Page 17 for how to use the front panel charging port.
2. Please refer to Page 16 for the detailed information about the LAN port.

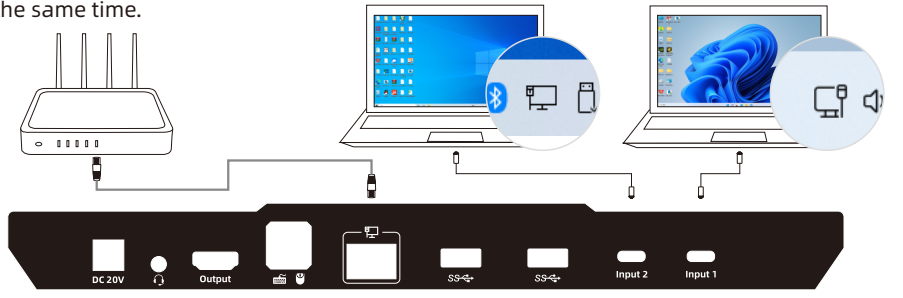
8.4 KVM Workbench

A workbench with 2x1 USB-C KVM Switch successfully connected is shown as below:

9. Function Description

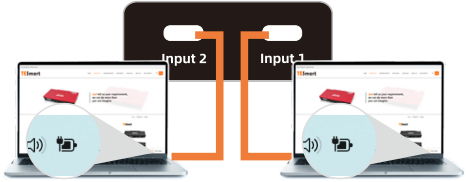
9.1 Built-in Network Switch

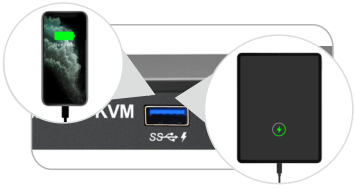
2X1 USB-C KVM Switch have a built-in USB Ethernet Adapter, which adds a standard RJ45 port to your Ultrabook, notebook that is connected to the KVM and allows you to connect your computer or tablet to a router or network switch for wired network connection. Full 1000Mbps Ethernet for fast, stable data transfer, more reliable than most wireless connections. Only one network cable can provide wired network connection for your 2 PCs at the same time.



9.2 Built-in charging module

The 2x1 USB-C KVM Switch comes with a powerful built-in charging module that allows you to charge, phone, tablet and other devices via the PD protocol while you use it. Connect the phone and tablet to the front USB-A and USB-C port of the KVM will be charged.





When charging using USB-A and USB-C ports, data transmission can be supported.support BC 1.2 protocol, and is able to match voltage and current automatically based on the specifications of charging devices. It makes your charging safe and avoid damage.

9.3 Keyboard and Mouse Emulation Mode

We provide two keyboard and mouse modes: Pass Through Mode and Legacy Emulation Mode. Pass Through mode supports most keyboard and mouse drivers and multifunction keyboards and mice. Legacy Emulation Mode ensures the normal functioning of the keyboard, mouse, and hotkey features.

- Typically, we recommend using Passthrough Mode for an optimal user experience, allowing you to:

If you encounter issues with the keyboard and mouse in Passthrough Mode, we recommend switching to Legacy Emulation Mode.

Tips: 1. To toggle between two modes, please refer to Page 22. After toggled, please restart the KVM.
2. In Legacy Emulation Mode, the keyboard and mouse control software will no longer be available.

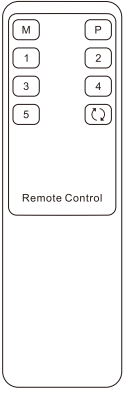
10. Operation Method

10.1 Front Panel Button Switching Method

The 2x1 USB-C KVM Switch can switch to any input devices at any time with front panel keypad, IR remote control and keyboard hot keys. You can choose your favorite switching method according to your personal needs and habits.

→ Switch the input devices by pressing those **[Select]** buttons on the front panel of the KVM Switch. Press the button **[Select]** corresponding to the identification of each PC to switch to the desired PC. The indicators will be lit to indicate which PC is currently displayed.

10.2 IR Remote Control



1 —— Switch to display PC 1

2 —— Switch to display PC 2

Tips: Unspecified buttons at above are non-functional.

10.3 Keyboard Hot Keys

→ Use external keyboard hot keys to switch the input source or set up some other functions..

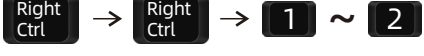
Tips: The keyboard hot keys can only work with external keyboard correctly connected to the keyboard and mouse input port of the KVM.

After press **[Right-Ctrl]** key twice within 2 seconds then please enter the commands within 3 seconds and the KVM will execute the corresponding commands.

Select previous input port:
[Right-Ctrl]→[Right-Ctrl]→[PgUp]

Select next input port:
[Right-Ctrl]→[Right-Ctrl]→[PgDn]

Select port by port number:
[Right-Ctrl]→[Right-Ctrl]→[1]~[2]



Disable/enable follow mode:

Tips: "Follow Mode" refers to whether the audio devices and USB 3.0 devices connected to the front panel will switch synchronously with the keyboard and mouse focus when switching.

[Right-Ctrl] →[Right-Ctrl] →[~]

Tips: The default setting of follow mode is enabled. When you disable it, the buzzer will emit only 1 short beep; when enable it, the buzzer will emit 2 short beeps.

When Follow Mode is disabled, you can use the following hotkeys to switch audio and USB 3.0 channels between PCs:
[Right-Ctrl] →[Right-Ctrl] →[0]

Toggle between keyboard and mouse modes:
[Right-Ctrl] →[Right-Ctrl] →[F2]

Tips: The default keyboard and mouse mode is Pass Through mode. When switching to Legacy Emulation Mode, the buzzer will emit 2 short beeps; when switching to Pass Through Mode, the buzzer will emit only 1 short beep.

Disable/enable built-in network card:
[Right-Ctrl] →[Right-Ctrl] →[F4]

Tips: The built-in network card is enabled by default. Enable it will trigger the buzzer to beep twice and disable it will trigger the buzzer to beep once.

Turn on/off mouse wheel switching mode:

Tips: Mouse wheel switching method can quickly switch input sources by mouse operation, double-click the mouse wheel to switch to the next input port. Mouse wheel switching mode is off by default. Turning on the mouse wheel switching mode will trigger the buzzer to beep twice and turning it off will trigger the buzzer to beep once.

[Right-Ctrl] →[Right-Ctrl] →[F6]

Disable or enable buzzer sound:
[Right-Ctrl] →[Right-Ctrl] →[F11]

Tips: The default setting of buzzer sound is enabled. Repeat this step to disable or enable buzzer sound.

11. Change Hot Key Combinations

For your convenience, we have built-in a custom hotkey function. By setting, you can use any key on the keyboard connected to the KVM as the trigger key for the hot key command. The default hotkey trigger key is the **[Right-CTRL]**. The custom hotkey function can be set in the following ways:

Method 1:

→ After powering on the KVM, press and keep holding the **[Select ②]** button on the front panel for 10 seconds until you hear the buzzer is long beeping. When starting to set the trigger key, the buzzer will have a 5 seconds tone. Please press the key you want to use as the hot key trigger key on the keyboard within 5 seconds. After pressing the button, the prompt tone ends and the setting is complete.

Method 2:

→ Press [Right-Ctrl]→[Right-Ctrl]→[F1], then the buzzer will have a 5 seconds tone. Please press the key you want to use as the hot key trigger key on the keyboard within 5 seconds. After pressing the button, the prompt tone ends and the setting is complete.

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